LISTING OF CLAIMS

1. (currently amended) An isolated coronavirus nucleic acid molecule selected from the group consisting of:~~genome comprising the nucleic acid as set forth in SEQ ID NO: 1.~~

(a) a nucleic acid molecule comprising the nucleotide sequence as set forth in SEQ ID NO: 1;

(b) a nucleic acid molecule comprising a nucleotide sequence having at least 95% sequence identity with the nucleotide sequence as set forth in SEQ ID NO: 1; and

(c) a nucleic acid molecule comprising a nucleotide sequence having at least 95% sequence identity with a fragment of the nucleotide sequence as set forth in SEQ ID NO: 1, wherein the fragment encodes a coronavirus protein.

2. (currently amended) ~~An isolated coronavirus protein comprising the amino acid sequence as set forth in:~~The isolated nucleic acid molecule of claim 1 (c), wherein the fragment encodes a coronavirus protein comprising the amino acid sequence as set forth in:

SEQ ID NO: 2 (polyprotein 1a);
SEQ ID NO: 3 (polyprotein 1b);
SEQ ID NO: 4 (S protein);
SEQ ID NO: 5 (X1 protein);
SEQ ID NO: 6 (X2 protein);
SEQ ID NO: 7 (E protein);
SEQ ID NO: 8 (M protein);
SEQ ID NO: 9 (X3 protein);
SEQ ID NO: 10 (X4 protein);
SEQ ID NO: 11 (X5 protein); or
SEQ ID NO: 12 (N protein).

3. (cancelled)

4. (currently amended) The isolated nucleic acid molecule of ~~claim 3~~claim 1 (c), comprising a nucleotide sequence as set forth in:

nucleotides 265 to 13,398 of SEQ ID NO: 1 (encoding polyprotein 1a);
nucleotides 13,398 to 21,482 of SEQ ID NO: 1 (encoding polyprotein 1b);
nucleotides 21,492 to 25,256 of SEQ ID NO: 1 (encoding S protein);
nucleotides 25,268 to 26,089 of SEQ ID NO: 1 (encoding X1 protein);
nucleotides 25,689 to 26,150 of SEQ ID NO: 1 (encoding X2 protein);
nucleotides 26,117 to 26,344 of SEQ ID NO: 1 (encoding E protein);
nucleotides 26,398 to 27,060 of SEQ ID NO: 1 (encoding M protein);
nucleotides 27,074 to 27,262 of SEQ ID NO: 1 (encoding X3 protein);
nucleotides 27,273 to 27,638 of SEQ ID NO: 1 (encoding X4 protein);
nucleotides 27,864 to 28,115 of SEQ ID NO: 1 (encoding X5 protein); or
nucleotides 28,120 to 29,385 of SEQ ID NO: 1 (encoding N protein).

5. (currently amended) A method of detecting a severe acute respiratory syndrome-associated coronavirus (SARS-CoV) in a sample, comprising:

contacting the sample with a pair of nucleic acid primers that hybridize to ~~a SARS-CoV nucleic acid~~ a nucleic acid molecule of claim 1, wherein at least one primer is 5'-end labeled with a reporter dye;

amplifying the ~~SARS-CoV~~ nucleic acid molecule or a fragment thereof from the sample utilizing the pair of nucleic acid primers;

electrophoresing the amplified products; and

detecting the 5'-end labeled reporter dye, thereby detecting a SARS-CoV.

6. (original) The method of claim 5, wherein the amplification utilizes reverse transcriptase-polymerase chain reaction.

7. (currently amended) The method of claim 5, wherein at least one of the nucleic acid primers that hybridize to ~~a SARS-CoV nucleic acid~~ the nucleic acid molecule comprises a sequence as set forth in any one of SEQ ID NOs: 13-15.

8. (currently amended) A method of detecting a severe acute respiratory syndrome-associated coronavirus (SARS-CoV) in a sample, comprising:

contacting the sample with a pair of nucleic acid primers that hybridize to ~~a SARS-CoV nucleic acid~~ a nucleic acid molecule of claim 1;

amplifying the ~~SARS-CoV~~ nucleic acid molecule or a fragment thereof from the sample utilizing the pair of nucleic acid primers;

adding to the amplified ~~SARS-CoV~~ nucleic acid molecule or the fragment thereof a TaqMan SARS-CoV probe that hybridizes to the ~~SARS-CoV~~ nucleic acid molecule or the fragment thereof, wherein the TaqMan SARS-CoV probe is labeled with a 5'-reporter dye and a 3'-quencher dye;

performing one or more additional rounds of amplification; and

detecting fluorescence of the 5'-reporter dye, thereby detecting a SARS-CoV.

9. (original) The method of claim 8, wherein the amplification utilizes reverse transcriptase-polymerase chain reaction.

10. (currently amended) The method of claim 8, wherein at least one of the nucleic acid primers that hybridize to ~~a SARS-CoV nucleic acid~~ the nucleic acid molecule and/or the TaqMan SARS-CoV probe that hybridizes to the ~~SARS-CoV~~ nucleic acid molecule comprises a sequence as set forth in any one of SEQ ID NOs: 16-33.

11-14. (cancelled)

15. (currently amended) A kit for detecting a severe acute respiratory syndrome-associated coronavirus (SARS-CoV) in a sample, comprising:

a pair of nucleic acid primers that hybridize under stringent conditions to ~~a SARS-CoV nucleic acid~~ a nucleic acid molecule of claim 1, wherein one primer is 5'-end labeled with a reporter dye.

16. (currently amended) The kit of claim 15, wherein at least one of the nucleic acid primers that hybridize to ~~a SARS-CoV nucleic acid~~ the nucleic acid molecule comprises a sequence as set forth in any one of SEQ ID NOs: 13-15.

17. (currently amended) A kit for detecting a severe acute respiratory syndrome-associated coronavirus (SARS-CoV) in a sample, comprising:

a pair of nucleic acid primers that hybridize under high stringency conditions to ~~a SARS-CoV nucleic acid~~ a nucleic acid molecule of claim 1; and

a TaqMan SARS-CoV probe that hybridizes to the ~~SARS-CoV~~ nucleic acid molecule, wherein the TaqMan SARS-CoV probe is labeled with a 5'-reporter dye and a 3'-quencher dye.

18. (currently amended) The kit of claim 17, wherein at least one of the nucleic acid primers that hybridize to ~~a SARS-CoV nucleic acid~~ the nucleic acid molecule and/or the TaqMan SARS-CoV probe that hybridizes to the ~~SARS-CoV~~ nucleic acid molecule comprises a sequence as set forth in any one of SEQ ID NOs: 16-33.

19-23. (cancelled)

24. (new) The isolated nucleic acid molecule of claim 1, consisting of the nucleotide sequence as set forth in SEQ ID NO: 1.